

TABLE 17 – SUSTAINABLE COMMUNITY PILOT PROGRAMS

“Sustainable Development Strategies for Cleaner, Healthier Communities” Patrick G. Lana, Associate Director, Community Services Team, U.S Dept. of Energy, Denver Regional Office

Nationally, imported oil is a major contributor to our trade deficit. About \$50 billion flows out of the U.S. economy each year to pay for foreign oil. The same is true for many of our states and localities. Massachusetts imports 97% of its energy at a cost of \$11 billion each year; Iowa imports 95% at a cost of \$5 billion. Wisconsin imports 94%, New York 92%, Rhode Island 90%. Even Texas, in the middle of the oil patch, is now a net energy importer. The money that pays for imported energy immediately leaves the local economy. In the typical community, 70 to 80 cents of every energy dollar immediately drains away.

The Rocky Mountain Institute calculates that the average town of 5,000 spends about 20% of its gross income on energy, more than \$20 million each year. \$16 million of that immediately leaks away. If the town cut its energy use by 25%, that would be a \$4 million boost to the local economy. Houston provides just one example of how big these leaks can be. The Wall Street Journal reports that in one year, residents of Houston paid more than \$3.3 billion to cool their buildings --- more than the gross national products of 42 African nations. Another leak is lost productivity due to traffic congestion. According to the General Accounting Office, we sacrifice \$100 billion annually in lost productivity because of traffic jams.

What's more, the Office of Air and Radiation of the Environmental Protection Agency (EPA) predicts that by the year 2005, growth in vehicle miles traveled will begin to overtake improvements in air quality from cleaner fuels and less-polluting cars. In other words, after 30 years of steady improvements in air quality, the nation will begin to lose the battle because of burgeoning growth in automobile travel.

Our reliance on cars, and on petroleum to fuel them, are also a major cause of the nation's trade deficit. About \$50 billion each year leaks from the U.S. economy to pay for imported oil. Each day, Americans use 4 million more barrels of oil for transportation than we produce. We now import more than half the oil we use -- more than we did during the Persian Gulf wars of the 1970s -- and the number is rapidly climbing.

Transportation is also the major cause of greenhouse gas pollution, which is blamed for global warming. Vehicles in the U.S. contribute 78% of the carbon dioxide, 45% of the nitrogen oxide, and 37% of volatile organic compounds found in the air in major metro areas. This isn't just a global warming problem - it's a public health problem. More than 125 million Americans breathe unhealthy air and 15,000 die from it each year.

In his Table Talk session, Pat Lana will discuss the newest approaches being used by communities around the country to achieve "sustainable development," including innovative projects, policy statements and progress indicators.

One way to describe sustainable development is in terms of "systems thinking." Our communities are complex places. So are many of our problems. We can't be successful in the long term if we deal with our communities merely as a collection of unrelated crises.

We need to realize that the economy, the environment, the quality of life, the social systems and institutions of our communities -- all of them are interconnected. To solve problems in these community systems, we need systems thinking.

In addition, we need to apply systems thinking not only to our communities, but to the components within them. Buildings are systems. Transportation networks are systems. In addition, our communities are built in the midst of natural systems. We need to begin to deal with each of them, and all of them together, holistically.

Patrick Lana, will share his perspective on strategies for community development particularly through the effective use of energy efficiency and renewable energy technologies in the buildings, commercial, and transportation sectors. He will touch on case studies from around the country as well as tools and resources that communities can tap into to develop sustainably.